

Work Order ID 58283

May 3, 2010 9:55:36 AM



Page 1

Item ID: D412-702-121B

Accept



Setup Start



Revision ID:

Item Name: Harness Assembly

Stop



Start Date: 03/05/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 13/05/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

M

Date: 10-5-03

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
DSI 9469	A

50

0.00



DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D412-702-121B / DSI 9469
CHG001

N/A

100

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

50/06/23 @

110

0.00



Small Fab

Memo

0.00

Small Fab

Assemble as per DSI9469

50/06/23 @

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 58283

May 3, 2010 9:55:36 AM



Page 2

Item ID: D412-702-121B

Accept



Setup Start



Revision ID:

Stop



Item Name: Harness Assembly

Start Date: 03/05/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 13/05/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

S 10/06/23



130



Packaging

Packaging

Memo

Identify and pack for shipping as per PPP D412-702-123B / DSI 9469

Location: 819

PPP rev: _____

0.00

0.00

10-6-23

140



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/06/24

CL 10/6/24

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries






May 3, 2010 9:55:41 AM

[illegible]**Start Date:** 03/05/2010

Required Date: 13/05/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty per Kit On Hand	Qty Issued	Date Issued	Status
D3570-3  Bracket		Manufactured	No				Each	15.0000	1		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>			
				ST245A		15					
					52885	15					
D3579-047  Shoulder Harness		Manufactured	No				Each	0.0000	1		
MS24694-S50  Screw		Purchased	No				Each	106.0000	4		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>			
				ST289		106					
					113538	106					
AN960JD10L  Washer		Purchased	No				Each	4,327.000	4		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>			
				ST348		4327					
					110985	4327					
MS21042L3  Nut		Purchased	No				Each	1,770.000	1		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>			
				ST300		1770					
					113537	20					
					113644	750					
					114523	1000					

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

May 3, 2010 9:55:41 AM

Page 2

Work Order ID: 58283



Parent Item: D412-702-121B



Parent Item Name: Harness Assembly

Start Date: 03/05/2010

Required Date: 13/05/2010

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	---------------	----------------	--------

D3569-3

Manufactured

No

Each

2.0000

1



Decal

Location

Loc Qty

Loc Code

ST245A

2

56385

2



N/A use on the
assembly D3579-047
CZ10/6/24

May 3, 2010 9:55:41 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

SHOP COPY

RETURN TO
ENGINEERING

UNCONTROLLED COPY

DART SERVICE INSTRUCTION
TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. E AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-702 REV. 3REF TCCA STC: SH04-7
REF FAA STC: SR01997NY
REF EASA STC: EASA.IM.R.S.00710SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 58283210-5-03**PURPOSE:**

Update the D412-702-041A/045A/-041B/-045B kits for compatibility with the Dart D412-769-011 Aft Facing Seat Kit.

CHANGE:

Quantity (1) each of D412-702-111A/-113A is replaced with D412-702-121A/-123A. Also Qty (4) x AN4-27A bolts are added to the kits for compatibility with the Dart seat. When installing the AN4 bolts in the Dart seat, open the Ø0.188" holes to Ø0.257" (see sheet 4 detail J of this service instruction for reference). Alternate nuts added (see flag note 2 & 3, sheet 4). The parts list in section 25.28 (pg. 87) of ICA-D412-702 Rev. 3 and section 7.0 (pg. 38) of IIN-D412-702 Rev. E is amended as follows:

QTY	QTY	QTY	QTY	QTY	PART NUMBER	DESCRIPTION
-041A	-043A	-045A	-047A	-049A		
X					D412-702-041A	Dart 13-Man 3-Point Shoulder Harness Kit
		X			D412-702-045A	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit

IS:

1		1			D412-702-111A	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-121A	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-3	BRACKET
1*		1*			D3579-043	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-1	DECAL
1		1			D412-702-113A	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-123A	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-4	BRACKET
1*		1*			D3579-044	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-2	DECAL
4		4			AN4-27A	BOLT (NEW)

WAS:

2		2			D412-702-111A	HARNESS ASSEMBLY
2		2			D412-702-113A	HARNESS ASSEMBLY

* DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: [Signature]
D. SHEPHERD (DE # 02)DATE: 10.01.13
CERT. NO.: SH04-7
ISSUE NO.: 3

C	UPDATE MS51865-6C ACORN NUT QUANTITY	JPH	10.01.13
B	ADD FLAG NOTE 2 & 3 AND OPEN AN3 HOLES TO AN4	CP	09.12.10
A	NEW ISSUE, NCR 09-068	CP	09.06.30
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9469	SHEET 1 OF 5
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/1058283

The parts list in section 25.28 (pg. 93) of ICA-D412-702 Rev. 3 and section 7.0 (pg. 40) of IIN-D412-702 Rev. E is amended as follows:

QTY -041B	QTY -043B	QTY -045B	QTY -047B	QTY -049B	PART NUMBER	DESCRIPTION
X					D412-702-041B	Dart 13-Man 3-Point Shoulder Harness Kit
		X			D412-702-045B	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit

IS:

1		1			D412-702-111B	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-121B	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-3	BRACKET
1*		1*			D3579-047	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-3	DECAL
1		1			D412-702-113B	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-123B	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-4	BRACKET
1*		1*			D3579-048	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-3	DECAL
4		4			AN4-27A	BOLT (ADD)

WAS:

2		2			D412-702-111B	HARNESS ASSEMBLY
2		2			D412-702-113B	HARNESS ASSEMBLY






* DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.01.13
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN		DART AEROSPACE LTD	
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CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9469	SHEET 2 OF 5
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Figures 4.8 (pg. 25) of IIN-D412-702 Rev. E and 25.12 (pg. 69) of ICA-D412-702 Rev. 3 are updated as follows:

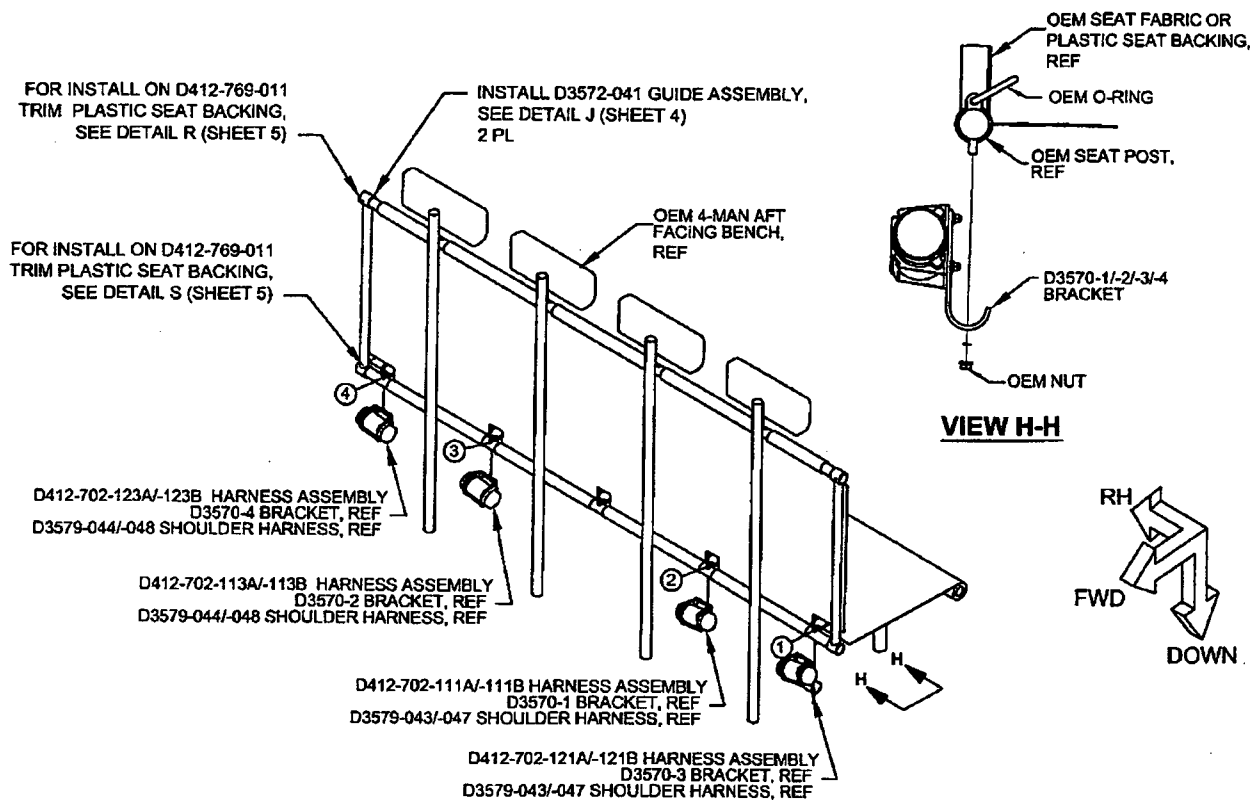


FIGURE 4.8. SHOULDER BELT INSTALLATION

FIGURE 25.12 D412-702-045A/-045B 4-MAN 3-POINT AFT FACING SHOULDER HARNESS KIT

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BRANCH
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BY: *[Signature]*
D. SHEPHERD (DE # 02)

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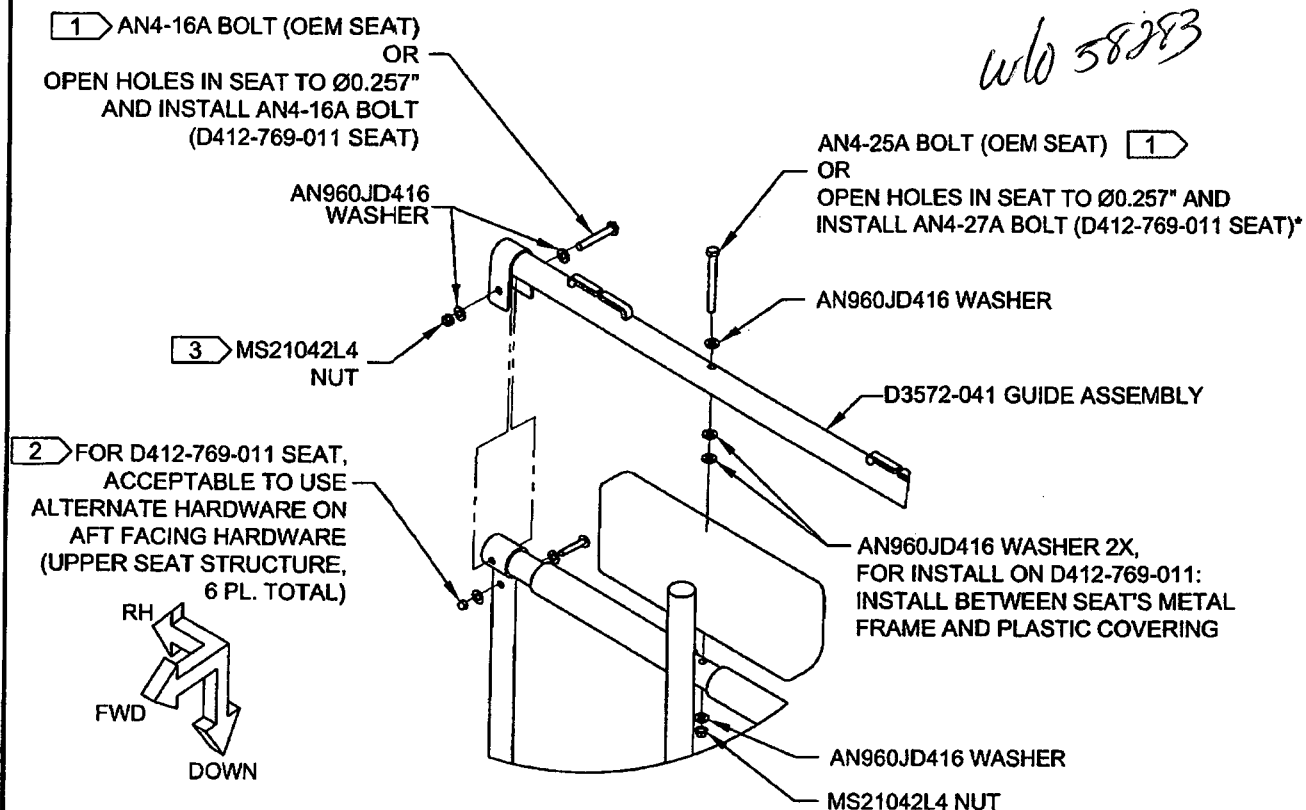
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DETAIL J: D3572-041 INSTALLATION
(RH SHOWN, LH OPPOSITE)

- 1 ACCEPTABLE TO USE LONGER/SHORTER AN4 BOLTS,
ADD ADDITIONAL AN960JD416 WASHERS, OR SUBSTITUTE
AN960JD416L WASHERS TO ENSURE 1.5-2 THREADS IN SAFETY
- 2 ACCEPTABLE TO USE MS51865-6C AS ALTERNATE NUT (6 PLACES
TOTAL PER D412-769-011 SEAT KIT). IF ALT NUT IS USED, ADD
AN960JD10/10L WASHER AS REQD (HEAD BOLT SIDE) TO ENSURE
PROTRUDING THREADS MEASURE 0.160 MIN, 0.190 MAX. (BEFORE
NUT INSTALLATION)
- 3 ACCEPTABLE TO USE MS51865-8C AS ALTERNATE NUT (2 PLACES
TOTAL PER D412-769-011 SEAT KIT). IF ALT NUT IS USED, ADD
AN960JD416/416L WASHER AS REQD (HEAD BOLT SIDE) TO ENSURE
PROTRUDING THREADS MEASURE 0.200 MIN, 0.250 MAX. (BEFORE
NUT INSTALLATION)

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BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.01.13
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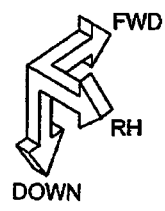
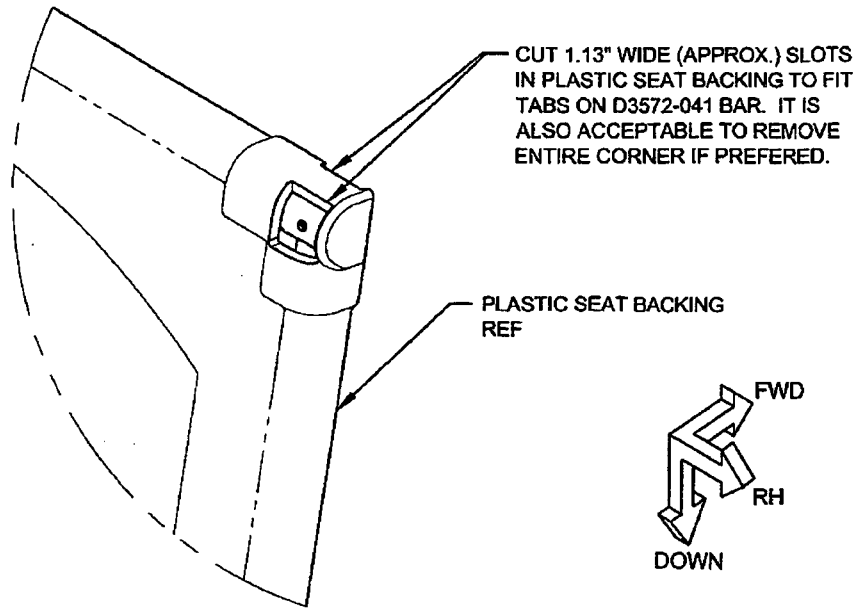
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

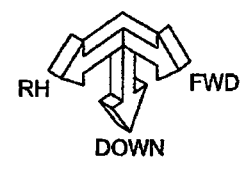
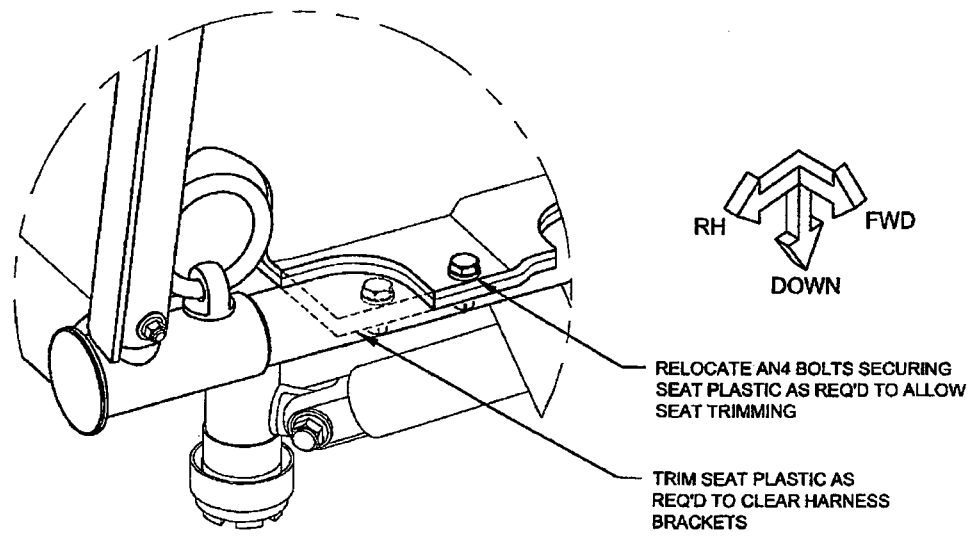
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46 58283



DETAIL R
VIEW LOOKING AT FRONT OF SEAT BACKING, TOP-RH CORNER SHOWN (TOP-LH CORNER SIMILAR),
FOR INSTALL ON D412-769-011 ONLY



DETAIL S
VIEW LOOKING AT REAR OF SEAT, BOTTOM-RH CORNER SHOWN (BOTTOM-LH CORNER SIMILAR),
FOR INSTALL ON D412-769-011 ONLY

CANADA
 DEPARTMENT OF TRANSPORT
 AIRCRAFT CERTIFICATION
 BRANCH
 DAO # 01-O-01

APPROVED
[Signature]
 BY: D. SHEPHERD (DE # 02)

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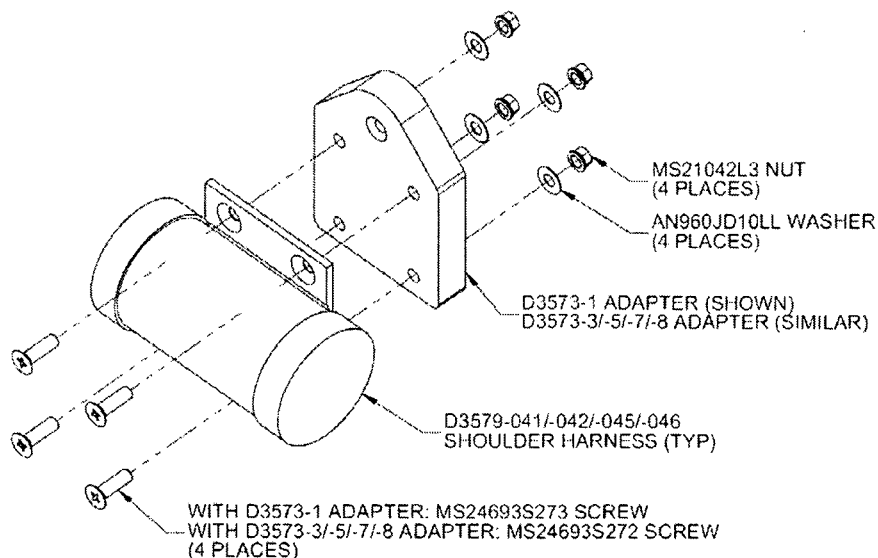
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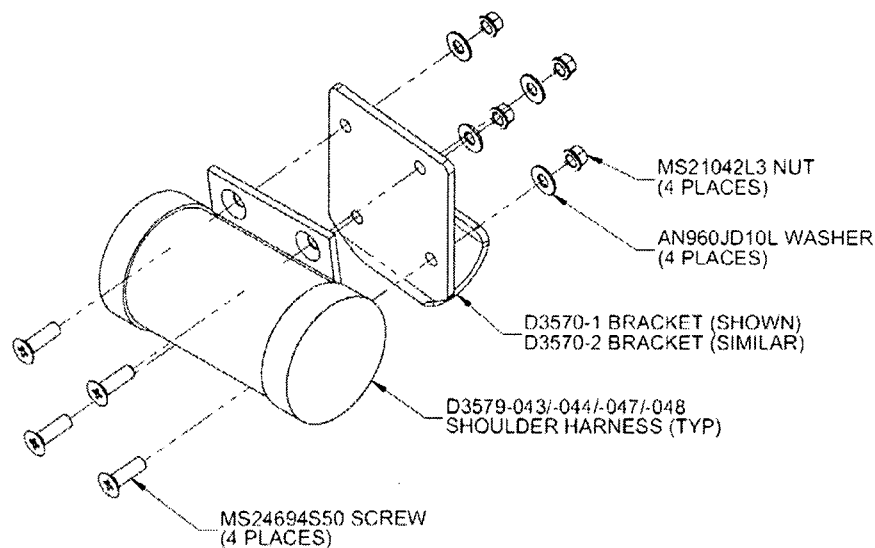
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



**DETAIL 'K' D412-702-101A/-103A/-105A/-107A/-109A/-115A/-117A AND
D412-702-101B/-103B/-105B/-107B/-109B/-115B/-117B HARNESS ASSEMBLIES**
(BELTS, K6.2 CLIP AND D3569-1/-2/-3 DECAL NOT SHOWN)



DETAIL 'L' D412-702-111A/-111B/-113A/-113B HARNESS ASSEMBLIES
(BELTS AND D3569-1/-2/-3 DECALS NOT SHOWN)

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